

Richard A. Muench
President and Chief Executive Officer

October 27, 2004 WM 04-0045

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555

Reference:

NRC Generic Letter 2004-01, "Requirements for Steam Generator

Tube Inspections," dated August 30, 2004

Subject:

Docket No. 50-482: Response to NRC Generic Letter 2004-01

#### Gentlemen:

This letter provides Wolf Creek Nuclear Operating Corporation's (WCNOC) response to NRC Generic Letter 2004-01, "Requirements for Steam Generator Tube Inspections." WCNOC has evaluated the Reference as it applies to Wolf Creek Generating Station (WCGS), and has reviewed plant information to address the requests made in the Generic Letter. Steam generator tube inspections performed at Wolf Creek Generating Station have not identified cracking in any of the areas previously inspected for degradation. From this review, WCNOC has concluded that steam generator tube inspections performed at WCGS are consistent with the NRC's position on tube inspections.

If you have any questions concerning this matter, please contact me at (620) 364-4000, or Mr. Kevin Moles at (620) 364-4126.

Very truly yours,

Richard A. Muench

RAM/ rig

Attachment

cc: J. N. Donohew (NRC), w/a

D. N. Graves (NRC), w/a

B. S. Mallett (NRC), w/a

Senior Resident Inspector (NRC), w/a

A115

STATE OF KANSAS	)	
	)	SS
<b>COUNTY OF COFFEY</b>	)	

Richard A. Muench, of lawful age, being first duly sworn upon oath says that he is President and Chief Executive Officer of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the contents thereof; that he has executed the same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

Ву

Richard A. Muench

President and Chief Executive Officer

SUBSCRIBED and sworn to before me this 27<sup>th</sup> day of 0ct., 2004.

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Notary Public

Expiration Date

7/8/06

# NRC Generic Letter 2004-01 Requirements for Steam Generator Tube Inspections

Provided below is Wolf Creek Nuclear Operating Corporation's (WCNOC) response to NRC Generic Letter 2004-01, "Requirements for Steam Generator Tube Inspections," dated August 30, 2004.

# Requested Information

1. Addressees should provide a description of the SG tube inspections performed at their plant during the last inspection. In addition, if they are not using SG tube inspection methods whose capabilities are consistent with the NRC's position, addressees should provide an assessment of how the tube inspections performed at their plant meet the inspection requirements of the TS in conjunction with Criteria IX and XI of 10CFR Part 50, Appendix B, and corrective action taken in accordance with Appendix B, Criterion XVI. This assessment should also address whether the tube inspection practices are capable of detecting flaws of any type that may potentially be present along the length of the tube required to be inspected and that may exceed the applicable tube repair criteria.

# WCNOC Response:

Steam generator tube inspections performed at Wolf Creek Generating Station are consistent with the NRC's position regarding tube inspections

Wolf Creek Generating Station has four Westinghouse Model F steam generators with stainless steel tube support plates and quatrefoil tube holes. The tubing material in each of the steam generators is Inconel Alloy 600 thermally treated. In addition, the first 10 rows had the u-bend area stress relieved after bending. The tubes are fully hydraulically expanded into the tube sheet.

Wolf Creek Nuclear Operating Corporation performed the following steam generator tube inspections at Wolf Creek Generating Station during the last inspection completed on October 31, 2003. This scope applies to two of four steam generators.

- 100% full length bobbin coil probe inspection (except R1 and R2 U-bends)
- 50% small radius (Row 1 and Row 2) U-bend with the plus point probe
- 55% Hot Leg Top of Tubesheet, + and 3 inches with the plus point probe
- 100% of Hot Leg straight section dings and dents > 5 volts by bobbin coil probe with plus point probe
- Plus point probe examination of all "I-codes" indications that were new or not resolved after history review
- Plus point probe examination of a 5% sample of bobbin coil probe indications that had not changed since the prior inspections ("H" and "S" codes)
- Plus point probe examination of Flow Distribution Baffle wear indications

Wolf Creek Nuclear Operating Corporation uses tube inspection methods that are capable of detecting flaw types that may be present. Prior to each inspection, a degradation assessment, which includes operating experience, is performed to identify degradation mechanisms that may be present, and a technique validation assessment is performed to verify that the eddy current techniques are capable of detecting those flaw types identified in the degradation assessment.

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### Requested information

2. If addressees conclude that full compliance with the TS in conjunction with Criteria IX, XI and XVI of 10 CFR Part 50, Appendix B, requires corrective action, they should discuss their proposed corrective actions (e.g., changing inspection practices consistent with the NRC's position or submitting a TS amendment request with the associated safety basis for limiting the inspections) to achieve full compliance. If addressees choose to change their TS, the staff has included in the Attachment suggested changes to the TS definitions for a tube inspection and for plugging limits to show what may be acceptable to the staff in cases where the tubes are expanded for the full depth of the tube sheet and where the extent of the inspection in the tube sheet region is limited

# WCNOC Response:

Steam generator tube inspections performed at Wolf Creek Generating Station are consistent with the NRC's position regarding tube inspections. Therefore, this question does not apply.

#### Requested information

3. For plants where SG tube inspections have not been or are not being performed consistent with the NRC's position on the requirements in the TS in conjunction with Criteria IX, XI, and XVI of 10 CFR Part 50, Appendix B, the licensee should submit a safety assessment (i.e., a justification for continued operation based on maintaining tube structural and leakage integrity) that addresses any differences between the licensee's inspection practices and those called for by the NRC's position. Safety assessments should be submitted for all areas of the tube required to be inspected by the TS, where flaws are not being used, and should include the basis for not employing such inspection techniques. The assessment should include an evaluation of (1) whether the inspection practices rely on an acceptance standard (e.g., cracks located at least a minimum distance of x below the top of tube sheet, even if these cracks cause complete severance of the tube) which is different from the TS acceptance standards (i.e., the tube plugging limits or repair criteria), and (2) whether the safety assessment constitutes a change to the "method of evaluation" (as defined in 10CRF50.59) for establishing the structural and leakage integrity of the joint. If the safety assessment constitutes a change to the method of evaluation under 10 CFR 50.59, the licensee should determine whether a license amendment is necessary pursuant to that regulation.

#### WCNOC Response:

Steam generator tube inspections performed at Wolf Creek Generating Station are consistent with the NRC's position regarding tube inspections. Therefore, this question does not apply.